

CLAIMS

1. A mobile station apparatus comprising:
 - a first receiver that performs first receive processing including demodulation, decoding, and error detection of a downlink data channel;
 - a second receiver that performs second receive processing, including demodulation and decoding of a downlink control channel that carries control information required in the first receive processing;
- 10 a transmitter that transmits a response signal in response to the error detection in the first receiver via an uplink control channel to a base station apparatus; and
 - a controller that stops at least one of the first receive processing, the second receive processing, and transmission processing of the response signal in the transmitter, depending on a transmission timing of the response signal.
2. The mobile station apparatus of claim 1, further comprising a detector that detects a period in which no uplink signal is transmitted to the base station apparatus,
 - wherein, when the period includes the transmission timing of the response signal, the controller stops one or both of the first receive processing with respect to a sub-frame of the downlink data channel corresponding to the response signal and the second receive processing

with respect to a sub-frame of the downlink control channel carrying control information that is necessary to receive said sub-frame of the downlink data channel.

3. The mobile station apparatus of claim 1, wherein,
5 when the transmitter repeats transmitting the response signal in response to a same sub-frame of the downlink data channel, the controller stops one or both of the first receive processing with respect to sub-frames of the downlink data channel corresponding to second and
10 later retransmissions and the second receive processing with respect to sub-frames of the downlink control channel carrying control information that is necessary to receive said sub-frames of the downlink data channel.

4. The mobile station apparatus of claim 1, further
15 comprising a detector that detects a timing a destination of the response signal changes from one base station apparatus to another base station apparatus,

wherein, when the timing is detected between a reception start timing of a sub-frame of the downlink data channel and a transmission end timing of a response signal corresponding to said sub-frame of the downlink data channel, the controller stops one or both of the first receive processing with respect to said sub-frame of the downlink data channel and the second receive processing with respect to a sub-frame of the downlink control channel carrying control information that is necessary to receive said sub-frame of the downlink data

channel.

5. The mobile station apparatus of claim 1, further comprising a detector that detects a timing a destination of the response signal changes from one base station
5 apparatus to another base station apparatus,

wherein, when the timing is detected between a reception start timing of a sub-frame of the downlink data channel and a transmission end timing of a response signal corresponding to said sub-frame of the downlink
10 data channel, the controller stops the transmission processing of the response signal.

6. A receiving method comprising:

performing first receive processing including demodulation, decoding, and error detection of a downlink
15 data channel;

performing second receive processing, including demodulation and decoding of a downlink control channel that carries control information necessary to receive the downlink data channel;

20 transmitting to a base station apparatus a response signal in response to the error detection in the first receive processing via an uplink control channel; and

stopping at least one of the first receive processing, the second receive processing, and transmission
25 processing of the response signal, depending on a transmission timing of the response signal.